Google Drive



The Animal Spirit Doctrine and the Origins of Neurophysiology

C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower

Download now

Click here if your download doesn"t start automatically

The Animal Spirit Doctrine and the Origins of Neurophysiology

C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower

The Animal Spirit Doctrine and the Origins of Neurophysiology C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower
How do we become aware of things and events in the outside world, and how does the brain control the muscular system and behavior? This book examines the history of Western attempts to explain how messages might be sent from the sense organs to the brain and from the brain to the muscles. It focuses on a construct called animal spirit, which would permeate philosophy and guide physiology and medicine for over two millennia.

The authors' story opens along the Eastern Mediterranean, where they examine how Pre-Socratic philosophers related the soul to air-wind or pneuma. They then trace what Hippocrates, Plato and Aristotle wrote about this pneuma, and how Stoic and Epicurean philosophers approached it. They also visit Alexandria, where Hellenistic anatomists provided new thoughts about the nerves and the ventricles. Thereafter, the authors return to the Greek mainland, where they show how Galen's pneuma psychikon or spiritus animae would provide an explanation for sensations and movements.

Galen's writings would guide science and medicine for well over a thousand years, albeit with some modifications. One change, found in early Christian writers Nemesius and Augustine, involved assigning perception, cognition, and memory to different spirit-filled ventricles. After examining how pious Scholastics later dealt with the nerve spirit, the authors turn to how questions began to be raised about it in the 1500s and 1600s. Here they examine the rise of modern science with its revealing experiments, microscopic observations, and attempts to break with the past. Descartes, Swammerdam, Borelli, Glisson, Willis, Newton, Hartley, Boerhaave and Haller are among the featured players in this part of the story.

Nevertheless, the animal spirit doctrine continued to survive (although modified), because no adequate replacement for it was immediately forthcoming. The replacement theory stemmed from experiments on electric fishes started in the 1750s. Additional research on these fishes and then on frogs eventually led scientists to abandon their time-honored ideas. The authors trace some of the developments leading to modern electrophysiology and end with an epilogue centered on what this history teaches us about paradigmatic changes in the life sciences.

Download The Animal Spirit Doctrine and the Origins of Neur ...pdf

Read Online The Animal Spirit Doctrine and the Origins of Ne ...pdf

Download and Read Free Online The Animal Spirit Doctrine and the Origins of Neurophysiology C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower

---

From reader reviews:

Carol Hughes:

This The Animal Spirit Doctrine and the Origins of Neurophysiology book is not ordinary book, you have it then the world is in your hands. The benefit you will get by reading this book is usually information inside this reserve incredible fresh, you will get information which is getting deeper you actually read a lot of information you will get. This The Animal Spirit Doctrine and the Origins of Neurophysiology without we recognize teach the one who reading it become critical in contemplating and analyzing. Don't always be worry The Animal Spirit Doctrine and the Origins of Neurophysiology can bring once you are and not make your case space or bookshelves' grow to be full because you can have it within your lovely laptop even mobile phone. This The Animal Spirit Doctrine and the Origins of Neurophysiology having great arrangement in word and layout, so you will not feel uninterested in reading.

Sherrill Height:

Reading a e-book can be one of a lot of activity that everyone in the world enjoys. Do you like reading book and so. There are a lot of reasons why people fantastic. First reading a e-book will give you a lot of new facts. When you read a book you will get new information since book is one of several ways to share the information or maybe their idea. Second, looking at a book will make anyone more imaginative. When you looking at a book especially fiction book the author will bring you to definitely imagine the story how the characters do it anything. Third, you are able to share your knowledge to some others. When you read this The Animal Spirit Doctrine and the Origins of Neurophysiology, you are able to tells your family, friends and soon about yours book. Your knowledge can inspire the mediocre, make them reading a guide.

Teresa Riggs:

The publication with title The Animal Spirit Doctrine and the Origins of Neurophysiology has a lot of information that you can discover it. You can get a lot of profit after read this book. This book exist new expertise the information that exist in this reserve represented the condition of the world now. That is important to yo7u to find out how the improvement of the world. This kind of book will bring you with new era of the the positive effect. You can read the e-book on your own smart phone, so you can read the item anywhere you want.

George Pinard:

The Animal Spirit Doctrine and the Origins of Neurophysiology can be one of your starter books that are good idea. Many of us recommend that straight away because this publication has good vocabulary that may increase your knowledge in vocabulary, easy to understand, bit entertaining but still delivering the information. The writer giving his/her effort that will put every word into pleasure arrangement in writing The Animal Spirit Doctrine and the Origins of Neurophysiology but doesn't forget the main position, giving the reader the hottest along with based confirm resource details that maybe you can be certainly one of it.

This great information can drawn you into new stage of crucial imagining.

Download and Read Online The Animal Spirit Doctrine and the Origins of Neurophysiology C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower #RYWLIJC60T7

Read The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower for online ebook

The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower books to read online.

Online The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower ebook PDF download

The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower Doc

The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower Mobipocket

The Animal Spirit Doctrine and the Origins of Neurophysiology by C.U.M. Smith, Eugenio Frixione, Stanley Finger, William Clower EPub